Tree Solutions Inc
Consulting Arborists

Project No. TS - 6413

Arborist Report

TO:	Chris Burrus - Harbour Homes LLC
SITE:	13437 NE 100th St, Redmond, WA 98033
DATE:	February 27, 2019
PROJECT ARBORIST:	Joshua Petter ISA Certified Arborist #PN-8406A ISA Qualified Tree Risk Assessor Tyler Bunton ISA Certified Arborist #PN-8715A ISA Qualified Tree Risk Assessor
REVIEWED BY:	Katie Hogan ISA Certified Arborist #PN-8078A ISA Qualified Tree Risk Assessor
REFFERENCED PLANS:	Redmond 9 Short Plat, Source Harbour Homes LLC., Date September 20, 2018, Revised December 20, 2018
ATTACHED:	Table of Trees, Site Map, Exception Request Letters

Summary
Two hundred (200) trees were assessed at the above addressed site. One hundred and seventy-eight (178) of these trees were located within the property boundaries and twenty-two (22) trees were located off-site adjacent to the property with overhanging canopies.

One-hundred and seventy (170) of the site trees assessed meet the city definition of a healthy tree. Twenty-eight (28) of the healthy trees meet the definition of a landmark tree. Eight (8) trees were found to be in declining health or structural condition, five (5) of which are planned for removal. Due to their health condition, mitigation is not required following their removal.

The City of Redmond requires that 35-percent of healthy trees be retained throughout development. Of the 170 healthy trees located within the project area, 60 trees would need to be retained to meet city requirements (rounded to the nearest ten from 59.5).

Currently, 92 healthy site trees are proposed for retention, 39 healthy site trees are proposed to be impacted, and 39 healthy site trees are proposed to be removed. Total tree retention for this development project totals 54 percent (**92 retained** trees / **170 total** healthy trees = **54.1%**).

Three trees on neighboring property with overhanging canopies will be retained but are considered retained/impacted due to proposed disturbances within 5 radial feet of the drip line area as a result of

required roadway and frontage improvements. These trees will require appropriate tree protection measures that will ensure tree viability.

Forty-six total site and off-site trees are proposed for removal, six of which meet the landmark qualification. Significant trees removed shall be replaced at a 1:1 ratio; Landmark trees removed shall be replaced at a 3:1 ratio. Forty-two site and off-site trees are proposed to be impacted, 6 of which meet the landmark qualification. Exception requests for each removed and impacted Landmark tree will be submitted to the city.

According to RZC 21.72.080.B removed trees are required to be replaced. Impacted trees are not removed and therefore do not require replacement. **Fifty-eight** total replacement trees will be required to mitigate for removed trees.

Measurements of trees located on neighboring properties were estimated from the job site or the ROW. Shared trees and trees growing on site are labeled numerically on the site map, and trees growing in the ROW and on neighboring properties with overhanging canopies are labeled alphabetically.

Tree Protection

Retained trees should have protection measures established before the commencement of site work. Tree protection areas should include groups of trees wherever possible in order to maximize protection of the critical root zones. The included Tree Protection Specification should be followed throughout all phases of work. An International Society of Arboriculture (ISA) Certified Arborist should inspect tree protection fencing prior to the start of construction.

Recommendations

- Re-evaluate tree retention as plans are finalized, and house designs are available.
- Contact neighboring property owner to discuss tree removals if necessary, particularly tree H.
- Update plans to show removal of tree 1586, 1641, 1646-1651, and H.
- Update development plans to show tree protection measures in relation to proposed structures.
- Update construction limits on sheet 3/13.
- Update tree protection plan to include the redesigned stormwater outflow.
- Update tree protection fencing to actual locations, as it is not feasible in many of the current locations.
- Add clear numbers for trees 1613 and 1614.
- Obtain the necessary tree removal permission from the city before developing the site.
- Invasive species should be removed when developing the property.

Assignment & Scope of Report

This report outlines the site inspection by Joshua Petter and Tyler Bunton, of Tree Solutions Inc, made on July 12th, 2018.

We were asked to revise the arborist report, with reference to the proposed Redmond 9 Short Plat, dated December 20, 2019. These plans were provided to us by Harbour Homes LLC. We were asked to review the Redmond Zoning Code (RZC) requirements as they pertain to the project. We were asked to produce an Arborist Report including the species, size, health, and designation of each tree as it relates

to city code. Chris Burrus, of Harbour Homes LLC, requested these services to acquire information for project planning.

Specifics for each tree can be found in the attached Table of Trees. Site maps and photographs are followed by a glossary and list of references. Limits of assignment can be found in Appendix A. Methods can be found in Appendix B. Additional assumptions and limiting conditions can be found in Appendix C.

Observations

The Site

This 114,769 square-foot property is located in a RIN Single-Family Urban residential zone and is currently under consideration for development. The property fronts NE 100th St in Redmond. It currently contains three parcels. There are two houses, a garage, and shed on the property. There are a number of fences on the property, including a barbed wire fence that encompasses large portions of Tract B and C. The site is relatively flat on the northern half. The southern portion slopes downward to a stream and wetland area.

According to King County iMap the southern portion of the property is in a landslide hazard zone as well as an erosion hazard zone. The Redmond property viewer also shows that there is a class IV stream and a wellhead protection zone 4 at the south end of the property. There is no proposed development in these areas. The extent of the site can be seen on the attached site plans, and a 100-foot stream buffer is marked. The site is proposed to be developed into nine lots.

The Trees

We tagged and assessed 178 trees at the above addressed job site. Of these trees, 29 met the city definition of a landmark tree. Twenty-eight of the landmark trees were healthy at the time of our assessment.

The southern portion of the property consisted primarily of native woodland species including western redcedar (*Thuja plicata*), Douglas-fir (*Pseudotsuga menziesii*), and bigleaf maple (*Acer macrophyllum*). The northern portion of the property was primarily lawn space with ornamental and fruit trees throughout. These included apple (*Malus domestica*), plum (*Prunus domestica*), sycamore maple (*Acer pseudoplatanus*), and others.

There were some invasive understory plants growing on site including invasive ivy (*Hedera* spp.), English holly (*Ilex aquifolium*), Himalayan blackberry (*Rubus bifrons*), and periwinkle (*Vinca minor*); however, the majority of plants were native and include Oregon grape (*Mahonia aquilifolium*), raspberry (*Rubus* spp.), Salal (*Gaultheria shallon*), and sword fern (*Polystichum munitum*).

Tree 1670 and tree R are English holly (*Ilex aquifolium*) which is classified as a weed of concern in King County and is recommended for control in natural areas.

Specifics for each tree can be found in the attached Table of Trees.

Discussion - Retained, Impacted & Removed Trees

Trees

The Redmond Zoning Code (RZC) states that the tree protection area shall be a minimum of the drip line plus five additional radial feet added to the furthest extent of the drip line. Trees that are proposed to be retained, removed, or may be impacted, should be shown on a Tree Preservation Plan.

The RZC states that a minimum of 35-percent of all significant trees on the project site shall be retained on any new development site, along with all Landmark trees, unless an exception has been applied for and granted. All trees removed will need to be replaced at a 1:1 ratio for Significant trees and 3:1 ratio for Landmark trees. If the 35-percent retention level for significant trees is not achieved, each significant tree removed beyond 35-percent must be replaced at a 3:1 ratio.

Adjacent site trees with canopies overhanging the site as well as adjacent site trees that will be impacted by required road improvements are included in the overall count of retained, impacted, removed, and replacement trees. The trees on the adjacent properties are in varying health and structural condition. Careful construction practices should be implemented that do not over-excavate or encroach into the critical root zone of these trees.

Retained/Impacted Trees

Retained/Impacted refers to trees which will be retained and impacted by required frontage improvements. There are three trees located on adjacent property to the east of required road and utility improvements. These trees are I, J, and K with DSH's of approximately 10, 10, and 12 inches respectively. Because the impacts to these trees are a result of the frontage and utility improvements required by the city of Redmond, trees that are slated as retained/impacted can be retained.

Since these trees are young and relatively small diameter, in my opinion they should be able to survive construction if mitigation measures are followed. Tree K is a western hemlock tree, this species is sensitive to construction disturbances, and is in fair health condition. Extra care should be taken to preserve this tree. Disturbances should be minimized surrounding this tree, including landscaping.

All excavation for the road within five feet of the dripline should be done under the supervision of an ISA Certified Arborist. Pneumatic air excavation should be used for all excavation within these areas to identify roots. The arborist on site should determine if roots are suitable for retention or must be removed. Any roots greater than 1 inch that are designated for removal should be cut cleanly with a sharp saw.

Currently, the tree protection fencing on the referenced plans is located at the dripline plus 5 radial feet. The plans should locate this fencing at the edge of the road. For trees J and K the fencing could be moved to the edge of disturbance for the construction of the sidewalk.

Impacted Trees

Based on the plans provided to us there are currently 39 site trees, six of which are landmark trees, which are proposed to be impacted by site work. There are also three offsite trees proposed to be impacted. The Redmond Zoning Code (RZC) considers an impacted tree to be any tree that is disturbed within the tree protection area. The tree protection area is defined as an area equal to the drip line plus

five additional radial feet. Impacted trees are not to be counted towards the retention percentage for the site. Exception requests for impacted landmark trees will be submitted to the city.

Trees 1615, 1616, and 1617 are proposed to be impacted by the construction of an anchor point for an above ground stormwater outflow. It may be possible to move the anchor point outside of the tree protection area for some of these trees to avoid impacting them.

Trees 1586, 1589, 1609, 1610, 1611, 1612, 1613, 1641, 1649, 1650, 1651, and 1655, as well as offsite trees L, P, and V are proposed to be impacted by grading for housing pads and construction of a retaining wall at the edge of the lot lines.

Trees 1508-1517, 1558-1560, 1562-1566, 1568-1570, 1604-1606, 1609-1621 are also proposed to be impacted by excavation for and construction of a stormwater outflow. Alternative methods of excavation such as pneumatic air excavation should be used within 5 radial feet of the dripline to prevent damage to root systems of these trees. Any necessary root pruning should be done using a sharp saw under the supervision of an ISA Certified Arborist. Compaction of soil in this area should be avoided to the extent feasible. When installing silt fencing within the tree protection area the base of the silt fence should not be dug into the ground. Instead it should be secured using a material such as gravel above the existing soil surface in order to minimize soil and root disturbance. Any work beyond the stone retaining wall must be conducted with hand tools.

The retaining wall on the southwestern corner of lot nine would impact 1587-1589 and would require careful excavation under qualified arborist supervision. Pneumatic air excavation should be used in this area to identify roots and minimize root disturbance.

Trees I, J, and K adjacent to road improvements along the east side of the property will also require careful tree protection measures. Excavation along these trees should be done with pneumatic air excavation and under the supervision of a qualified arborist.

Tree protection specifications for offsite tree L should be taken into consideration when designing lot nine and siting the house location. Fencing location should be reassessed when individual lot plans are available.

Removed Trees

Thirty-nine healthy trees are proposed for removal on site, including four landmark trees. Additionally, seven offsite trees are proposed for removal, including two landmark trees. All healthy trees removed will require replacement or fee in lieu to meet mitigation requirements. Sixteen healthy trees will be removed for required frontage improvements (1575, 1577, 1578-1583, 1663, G, H, Q, R, S, T, and U) two of which (H and Q) are landmark trees. Trees G, Q, R, S, T, and U are located in the ROW along NE 100th St. These will require replacement at a 1:1 ratio for significant trees and a 3:1 ratio for landmark trees. Tree H is on the adjacent property and would likely not survive the construction of a road within a few feet of its trunk. Permission to remove this tree should be obtained from the neighboring property owner.

All other healthy trees to be removed (1585, 1586, 1652, 1656, 1657, 1658, 1659, 1660, 1661, 1662, 1665, 1666, 1667, 1668, 1669, 1670, 1672, 1673, 1674, 1675, 1676, 1677, 1678) are located within the areas to be graded for construction preparation.

Tree 1586 is a mature landmark Douglas-fir (*Pseudotsuga menziesii*) tree located on the southwest corner of proposed lot 9. This tree would have to be removed based on the new design of the retaining wall. This wall could potentially be reconfigured to retain the tree.

Figure 1. provides a description of the number of each tree scheduled to be removed, impacted, or retained, based on tree classification and site development schematics.

Site Trees					
Tree Type	Remove	Impacted	Retained/Impacted*	Retained	Total
Landmark (>30" DSH)	4	6	0	18	28
	2.4%	3.5%	0.0%	10.6%	16.5%
Significant (6" - 30")	35	33	0	74	142
	20.6%	19.4%	0.0%	43.5%	83.5%
Total	39	39	0	92	170
	22.9%	22.9%	0.0%	54.1%	100.0%
Replacement Trees	47	0	0	0	47

Off-Site Trees					
Tree Type	Remove	Impacted	Retained/Impacted*	Retained	Total
Landmark (>30" DSH)	2	0	0	1	3
	9.1%	0.0%	0.0%	4.5%	13.6%
Significant (6" - 30")	5	3	3	8	19
	22.7%	13.6%	13.6%	36.4%	86.4%
Total	7	3	3	9	22
	31.8%	13.6%	13.6%	40.9%	100.0%
Replacement Trees	11	0	0	0	11

*Significant trees are to be replaced at a 1:1 ratio; Landmark trees at a 3:1 ratio. Each significant tree removed beyond 35-percent retention must be replaced at a 3:1 ratio. *Impacted by utilities/frontage improvements count as retained trees per RZC 21.72.060 (C)(3)and (4) therefore total tree retention of 67.1% is obtained for site trees.*

Preliminary Replacement Tree Calculations
Landmark trees removed to be replaced at 3:1 = 6 x 3 = **18 replacement trees**.

Significant trees removed to be replaced at 1:1: 39 x 1 = **39 replacement trees.**

A total of **58 replacement trees** will be required to mitigate for trees removed on site.

Significant trees removed beyond the 35% minimum threshold to be replaced 3:1 = 0 x 0 = **0 replacement trees.**

Total Retention Percentage of 54.1 percent is obtained for this development project.

Replacement Trees

When significant trees are to be removed the city code states that replacement trees are to be a minimum of:

- Two-and-one-half-inch caliper at breast height for deciduous trees or
- Six feet in height for evergreen trees.
- The administrator may consider smaller-sized replacement trees if the applicant can demonstrate that smaller trees are more suited to the species, the site conditions, and the purposes of this section, and that such trees will be planted in sufficient quantities to meet the intent of this section.
- Replacement trees shall be primarily native species in order to restore and enhance the site as nearly as practicable to its pre-development character.
- The condition of replacement trees shall meet or exceed current American Nursery and Landscape Association or equivalent organization's standards for nursery stock.
- Installation of required replacement trees shall be in accordance with best management practices for landscaping which ensure the tree's long-term health and survival.
- All required tree replacement and other required mitigation shall be bonded or completed prior to issuance of a building permit.

Tree Protection Specification

- **Tree Protection Fencing:** All trees planned for retention or on neighboring properties that overhang the site shall be protected for the entire duration of the construction project. Tree protection fencing should consist of chain-link fencing installed at the extent of the tree protection area. Where trees are being retained as a group the fencing should encompass the entire area.
- **Soil Protection:** No parking, materials storage, or dumping (including excavated soils) are allowed within the tree protection area. Any heavy machinery should remain outside of the protection area unless soils are protected from the load. Acceptable methods of soil protection include applying 1 inch plywood over 3 to 4 inches of wood chip mulch, or use of Alturna mats (or equivalent product).
- **Excavation:** Excavation done at or within the tree protection area should be carefully planned to minimize disturbance. Where feasible consider using alternative methods such as pneumatic excavation which uses pressurized air to blow soil away from the root system, directional drilling to bore utility lines, or hand excavation to expose roots. Excavation done with machinery (backhoe) in proximity of trees should be performed slowly with flat front buckets, removing small amounts of soil at a time with one person on the ground spotting for roots. When roots

are encountered, excavation should stop and roots should be cleanly pruned as needed so they are not ripped or torn.

- **Root Pruning:** Root pruning should be limited to the extent possible. All roots shall be pruned with a sharp saw making clean cuts. Avoid fracturing and breaking roots with excavation equipment. Root cuts shall be immediately covered with soil or mulch and kept moist.
- **Duff/Mulch:** Retain and protect as much of the existing duff and understory as possible. Retained trees in areas where there are exposed soils shall have 4 to 6 inches of wood chips applied to help prevent water evaporation and compaction. Keep mulch 1 foot away from the base of the tree.
- **Irrigation:** Retained trees may require supplemental water if construction occurs during summer drought periods.
- **Pruning:** Any pruning required for construction and safety clearance in accordance with a pruning specification provided by the project arborist in accordance with American National Standards Institute ANSI A300 Standard Practices for Pruning. Use of an arborist with an International Society of Arboriculture Certification to perform pruning is strongly advised.

Photographs

Photo 1: There are many large native trees adjacent to the riparian area.

Photo 1: Some of the bigleaf maples (*Acer macrophyllum*) growing in the natural area had large cavities due to a heart rot decay.

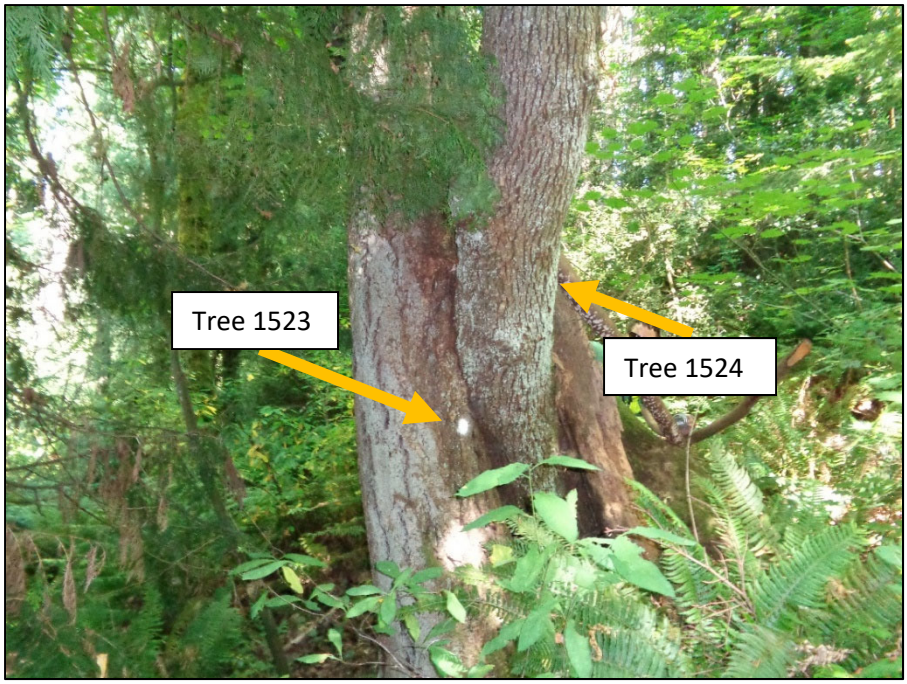

Photo 3: Tree 1524 growing around tree 1523. These trees were growing in the forested portion of the site.

Glossary

codominant stems: stems or branches of nearly equal diameter, often weakly attached (Matheny *et al.* 1998)
crown/canopy: the aboveground portions of a tree (Lilly 2001)
DSH: diameter at standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade (Matheny *et al.* 1998)
ISA: International Society of Arboriculture
included bark: bark that becomes embedded in a crotch between branch and trunk or between codominant stems and causes a weak structure (Lilly 2001)
landmark tree: a healthy tree with a DSH greater than 30-inches. (RZC)
structural defects: flaws, decay, or other faults in the trunk, branches, or root collar of a tree, which may lead to failure (Lilly 2001)

References

ANSI A300 (Part 1) – 2008 American National Standards Institute. American National Standard for Tree Care Operations: Tree, Shrub, and Other Woody Plant Maintenance: Standard Practices (Pruning). New York: Tree Care Industry Association, 2008.

Dunster & Associates Environmental Consultants Ltd. Assessing Trees in Urban Areas and the Urban-Rural Interface, US Release 1.0. Silverton: Pacific Northwest Chapter ISA, 2006

Lilly, Sharon. Arborists' Certification Study Guide. Champaign, IL: The International Society of Arboriculture, 2001.

Matheny, Nelda and James R. Clark. Trees and Development: A Technical Guide to Preservation of Trees During Land Development. Champaign, IL: International Society of Arboriculture, 1998.

Mattheck, Claus and Helge Breloer, The Body Language of Trees.: A Handbook for Failure Analysis. London: HMSO, 1994.

Redmond Zoning Code. http://www.codepublishing.com/WA/redmond.html

Appendix A - Limits of Assignment

Unless stated otherwise: 1) information contained in this report covers only those trees that were examined and reflects the condition of those trees at the time of inspection; and 2) the inspection is limited to visual examination of the subject trees without dissection, excavation, probing, climbing, or coring unless explicitly specified. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the subject trees may not arise in the future.

Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.

Appendix B - Methods

I evaluated tree health and structure utilizing visual tree assessment (VTA) methods. The basis behind VTA is the identification of symptoms, which the tree produces in reaction to a weak spot or area of mechanical stress. A tree reacts to mechanical and physiological stresses by growing more vigorously to reinforce weak areas, while depriving less stressed parts (Mattheck & Breloer 1994). An understanding of the uniform stress allows me to make informed judgments about the condition of a tree.

I measured the diameter at standard height (DSH) of each tree, typically at 54 inches above grade. If a tree had multiple stems, I measured each stem individually at standard height and determined a single-stem equivalent diameter by taking the average of the stem diameters, as established by the RZC.

Tree health considers crown indicators including foliar density, size, color, stem shoot extensions, decay, and damage. We have adapted our ratings based on the Purdue University Extension Formula Values for health condition. These values are a general representation used to assist in arborists in assigning ratings. Tree health needs to be evaluated on an individual basis and may not always fall entirely into a single category, however, I assigned a single condition rating for ease of clarity.

<u>Excellent</u>
Perfect specimen with excellent form and vigor, well-balanced crown. Normal to exceeding shoot length on new growth. Leaf size and color normal. Trunk is sound and solid. Root zone undisturbed. No apparent pest problems. Long safe useful life expectancy for the species.

<u>Good</u>
Imperfect canopy density in few parts of the tree, up to 10 percent of the canopy. Normal to less than ¾ of typical growth rate of shoots and minor deficiency in typical leaf development. Few pest issues or damage, and if they exist they are controllable or tree is reacting appropriately. Normal branch and stem development with healthy growth. Safe useful life expectancy typical for the species.

Fair
Crown decline and dieback up to 30 percent of the canopy. Leaf color is somewhat chlorotic/necrotic with smaller leaves and “off” coloration. Shoot extensions indicate some stunting and stressed growing conditions. Stress cone crop is clearly visible. Obvious signs of pest problems contributing to a lesser condition. Control might be possible. I found some decay areas in the main stem and branches. Below average safe useful life expectancy

Poor
Lacking full crown, more than 50 percent decline and dieback, especially affecting larger branches. Stunting of shoots is obvious with little evidence of growth on smaller stems. Leaf size and color reveals overall stress in the plant. Insect or disease infestation may be severe and uncontrollable. Extensive decay or hollows in branches and trunk. Short safe useful life expectancy.

Tree health condition ratings have been adapted from the Purdue University Extension bulletin FNR-473-W - Tree Appraisal.

Appendix C - Assumptions & Limiting Conditions

1. Consultant assumes that any legal description provided to Consultant is correct and that title to property is good and marketable. Consultant assumes no responsibility for legal matters. Consultant assumes all property appraised or evaluated is free and clear, and is under responsible ownership and competent management.

2. Consultant assumes that the property and its use do not violate applicable codes, ordinances, statutes or regulations.

3. Although Consultant has taken care to obtain all information from reliable sources and to verify the data insofar as possible, Consultant does not guarantee and is not responsible for the accuracy of information provided by others.

4. Client may not require Consultant to testify or attend court by reason of any report unless mutually satisfactory contractual arrangements are made, including payment of an additional fee for such Services as described in the Consulting Arborist Agreement.

5. Unless otherwise required by law, possession of this report does not imply right of publication or use for any purpose by any person other than the person to whom it is addressed, without the prior express written consent of the Consultant.

6. Unless otherwise required by law, no part of this report shall be conveyed by any person, including the Client, the public through advertising, public relations, news, sales or other media without the Consultant‘s prior express written consent.

7. This report and any values expressed herein represent the opinion of the Consultant, and the Consultant’s fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event or upon any finding to be reported.

8. All photographs included in this report were taken by Tree Solutions Inc. during the documented site visit, unless otherwise noted.

9. Sketches, drawings and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.

10. Unless otherwise agreed, (1) information contained in this report covers only the items examined and reflects the condition of the those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring. Consultant makes no warranty or guarantee, express or implied, that the problems or deficiencies of the plans or property in question may not arise in the future.

11. Loss or alteration of any part of this agreement invalidates the entire report.

Tree Solutions Inc
Consulting Arborists

Table of Trees

13437 NE 100th St
Redmond, WA 98033, USA

Date of Inventory: July 12, 2018
Table Prepared: August 29, 2018
Revised: February 27, 2019

Tree ID	Tree Location	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)	Tree Designation	Preliminary Tree Retention	Viability	Number of Replacement Trees	Notes
1501	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	45.7	Good	Good	10	Landmark	Retain	Viable		
1502	Site Tree	*Thuja plicata*	Western redcedar	8.8	Good	Good	8	Significant	Retain	Viable		
1503	Site Tree	*Acer macrophyllum*	Bigleaf maple	18.9	Good	Fair	13	Significant	Retain	Viable		Codominant, one stem mostly dead, some basal decay
1504	Site Tree	*Acer macrophyllum*	Bigleaf maple	21.4	Good	Good	13	Significant	Retain	Viable		
1505	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	29.5	Good	Good	11	Significant	Retain	Viable		
1506	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	18.9	Good	Good	9	Significant	Retain	Viable		Corrected lean north
1507	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	17.6	Good	Good	10	Significant	Retain	Viable		
1508	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.3	Good	Good	14	Landmark	Impacted	Viable		High live crown ratio, growing along canopy opening above stream
1509	Site Tree	*Tsuga heterophylla*	Western hemlock	19.4	Fair	Good	11	Significant	Impacted	Viable		Sparse needles
1510	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	16.5	Good	Good	14	Significant	Impacted	Viable		
1511	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	47.2	Good	Good	18	Landmark	Impacted	Viable		
1512	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	21.0	Good	Fair	10	Significant	Impacted	Viable		Lost top, one reiteration
1513	Site Tree	*Thuja plicata*	Western redcedar	10.9	Good	Good	9	Significant	Impacted	Viable		
1514	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	12.8	Good	Fair	9	Significant	Impacted	Viable		Lost top
1515	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	31.1	Good	Good	13	Landmark	Impacted	Viable		
1516	Site Tree	*Acer macrophyllum*	Bigleaf maple	24.5	Good	Good	15	Significant	Impacted	Viable		Codominant at 8 feet
1517	Site Tree	*Thuja plicata*	Western redcedar	15.2	Good	Good	8	Significant	Impacted	Viable		Codominant at 25 feet
1518	Site Tree	*Thuja plicata*	Western redcedar	14.3	Good	Good	11	Significant	Retain	Viable		
1519	Site Tree	*Acer macrophyllum*	Bigleaf maple	20.8	Good	Good	12	Significant	Retain	Viable		Some deadwood in canopy, phototropic to south
1520	Site Tree	*Acer macrophyllum*	Bigleaf maple	23.1	Good	Good	12	Significant	Retain	Viable		
1521	Site Tree	*Thuja plicata*	Western redcedar	9.4	Good	Good	13	Significant	Retain	Viable		
1522	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.5	Good	Good	17	Landmark	Retain	Viable		
1523	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	25.0	Good	Good	23	Significant	Retain	Viable		Growing between two stems of tree 1524
1524	Site Tree	*Acer macrophyllum*	Bigleaf maple	20.8	Good	Fair	21	Significant	Retain	Viable		Growing around tree 1523
1525	Site Tree	*Thuja plicata*	Western redcedar	13.4	Good	Fair	8	Significant	Retain	Viable		Lost leader at 6 feet
1526	Site Tree	*Thuja plicata*	Western redcedar	9.2	Good	Good	7	Significant	Retain	Viable		
1527	Site Tree	*Acer macrophyllum*	Bigleaf maple	11.6	Good	Poor	14	Significant	Retain - Unhealthy	Non-Viable		Failure at base, uncorrected lean north approximately 30 degrees, only live growth is epicormic shoots on trunk
1528	Site Tree	*Acer macrophyllum*	Bigleaf maple	18.2	Good	Good	13	Significant	Retain	Viable		
1529	Site Tree	*Acer macrophyllum*	Bigleaf maple	16.6	Good	Fair	11	Significant	Retain	Viable		Some basal decay
1530	Site Tree	*Thuja plicata*	Western redcedar	9.6	Good	Good	9	Significant	Retain	Viable		
1531	Site Tree	*Thuja plicata*	Western redcedar	9.1	Good	Good	8	Significant	Retain	Viable		
1532	Site Tree	*Thuja plicata*	Western redcedar	18.0	Good	Fair	11	Significant	Retain	Viable		Codominant at 1 foot, included bark to 5 feet
1533	Site Tree	*Acer macrophyllum*	Bigleaf maple	15.2	Good	Good	12	Significant	Retain	Viable		
1534	Site Tree	*Acer macrophyllum*	Bigleaf maple	8.4	Good	Fair	18	Significant	Retain	Viable		Codominant at base, small stem nearly dead
1535	Site Tree	*Thuja plicata*	Western redcedar	10.7	Good	Good	14	Significant	Retain	Viable		
1536	Site Tree	*Thuja plicata*	Western redcedar	13.0	Good	Good	12	Significant	Retain	Viable		
1537	Site Tree	*Acer macrophyllum*	Bigleaf maple	23.4	Good	Fair	15	Significant	Retain	Viable		Large basal wound with decay, good response growth, phototropic to south
1538	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	36.0	Good	Good	14	Landmark	Retain	Viable		Growing immediately adjacent to tree 1539 with seam to approximately 15 feet
1539	Site Tree	*Acer macrophyllum*	Bigleaf maple	25.0	Good	Fair	20	Significant	Retain	Viable		Codominant at 6 feet, growing next to tree 1538 with seam to approximately 15 feet, east stem has a splitting union at approximately 30 feet
1540	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	39.5	Good	Good	20	Landmark	Retain	Viable		
1541	Site Tree	*Acer macrophyllum*	Bigleaf maple	11.1	Good	Good	11	Significant	Retain	Viable		Wound from base to 15 feet, good response growth
1542	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	23.7	Good	Good	13	Significant	Retain	Viable		
1543	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	31.4	Good	Good	21	Landmark	Retain	Viable		
1544	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	27.7	Good	Good	14	Significant	Retain	Viable		
1545	Site Tree	*Acer macrophyllum*	Bigleaf maple	9.5	Good	Good	16	Significant	Retain	Viable		
1546	Site Tree	*Thuja plicata*	Western redcedar	7.8	Good	Good	8	Significant	Retain	Viable		
1547	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	11.8	Good	Good	12	Significant	Retain	Viable		
1548	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	20.0	Good	Good	13	Significant	Retain	Viable		
1549	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	19.5	Good	Good	11	Significant	Retain	Viable		
1550	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	33.5	Good	Good	19	Landmark	Retain	Viable		

Tree Solutions Inc
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Table of Trees
13437 NE 100th St
Redmond, WA 98033, USA

Date of Inventory: July 12, 2018
Table Prepared: August 29, 2018
Revised: February 27, 2019

Tree ID	Tree Location	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)	Tree Designation	Preliminary Tree Retention	Viability	Number of Replacement Trees	Notes
1551	Site Tree	*Acer macrophyllum*	Bigleaf maple	6.9	Good	Good	11	Significant	Retain	Viable		
1552	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	27.0	Good	Good	12	Significant	Retain	Viable		Epicormic shoots
1553	Site Tree	*Thuja plicata*	Western redcedar	8.8	Good	Good	10	Significant	Retain	Viable		
1554	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	10.8	Good	Fair	7	Significant	Retain	Viable		Lost top
1555	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	18.5	Good	Good	10	Significant	Retain	Viable		
1556	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	12.1	Good	Good	10	Significant	Impacted	Viable		
1557	Site Tree	*Thuja plicata*	Western redcedar	11.9	Good	Good	11	Significant	Impacted	Viable		
1558	Site Tree	*Acer macrophyllum*	Bigleaf maple	18.0	Good	Good	16	Significant	Impacted	Viable		Codominant at base
1559	Site Tree	*Acer macrophyllum*	Bigleaf maple	17.0	Good	Good	14	Significant	Impacted	Viable		Wound at 5 feet, good response growth
1560	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	20.0	Good	Good	13	Significant	Impacted	Viable		
1561	Site Tree	*Tsuga heterophylla*	Western hemlock	7.5	Good	Fair	8	Significant	Retain	Viable		Lost leader at 4 feet
1562	Site Tree	*Acer macrophyllum*	Bigleaf maple	9.9	Good	Good	17	Significant	Impacted	Viable		
1563	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	42.0	Good	Good	17	Landmark	Impacted	Viable		
1564	Site Tree	*Acer macrophyllum*	Bigleaf maple	8.4	Good	Good	12	Significant	Impacted	Viable		
1565	Site Tree	*Acer macrophyllum*	Bigleaf maple	15.8	Good	Good	16	Significant	Impacted	Viable		
1566	Site Tree	*Thuja plicata*	Western redcedar	11.9	Good	Good	6	Significant	Retain	Viable		
1567	Site Tree	*Acer macrophyllum*	Bigleaf maple	22.0	Good	Poor	19	Significant	Retain - Unhealthy	Non-Viable		Hollow at base to 6 feet
1568	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	26.5	Good	Good	12	Significant	Retain	Viable		
1569	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	31.8	Good	Good	17	Landmark	Impacted	Viable		
1570	Site Tree	*Acer macrophyllum*	Bigleaf maple	9.7	Good	Good	13	Significant	Impacted	Viable		
1571	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	31.0	Good	Good	15	Landmark	Retain	Viable		Bees, not tagged
1572	Site Tree	*Acer macrophyllum*	Bigleaf maple	6.5	Good	Good	12	Significant	Retain	Viable		
1573	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.0	Good	Good	16	Landmark	Retain	Viable		
1574	Site Tree	*Malus domestica*	Apple	11.0	Good	Poor	15	Significant	Remove - Unhealthy	Non-Viable		Remove for frontage improvements**, significant decay throughout
1575	Site Tree	*Malus domestica*	Apple	12.1	Good	Fair	15	Significant	Remove	Viable	1	Remove for frontage improvements**, decay
1576	Site Tree	*Malus domestica*	Apple	10.0	Good	Poor	12	Significant	Remove - Unhealthy	Non-Viable		Remove for frontage improvements**, large amount of decay in trunk
1577	Site Tree	*Malus domestica*	Apple	15.4	Good	Good	13	Significant	Remove	Viable	1	Remove for frontage improvements**
1578	Site Tree	*Malus domestica*	Apple	12.4	Good	Good	10	Significant	Remove	Viable	1	Remove for frontage improvements**
1579	Site Tree	*Prunus domestica*	Common plum	12.0	Good	Good	8	Significant	Remove	Viable	1	Remove for frontage improvements**
1580	Site Tree	*Prunus emarginata var. mollis*	Bitter cherry	10.7	Good	Good	18	Significant	Remove	Viable	1	Remove for frontage improvements**
1581	Site Tree	*Prunus emarginata var. mollis*	Bitter cherry	9.2	Good	Good	8	Significant	Remove	Viable	1	Remove for frontage improvements**
1582	Site Tree	*Prunus emarginata var. mollis*	Bitter cherry	6.4	Good	Good	13	Significant	Remove	Viable	1	Remove for frontage improvements**
1583	Site Tree	*Acer pseudoplatanus*	Sycamore maple	11.3	Good	Fair	13	Significant	Remove	Viable	1	Remove for frontage improvements**
1584	Site Tree	*Acer pseudoplatanus*	Sycamore maple	6.7	Good	Poor	11	Significant	Remove - Unhealthy	Non-Viable		Remove for frontage improvements**, multiple stems from base with included bark
1585	Site Tree	*Acer macrophyllum*	Bigleaf maple	34.1	Good	Good	34	Landmark	Remove	Viable	3	Deadwood in canopy
1586	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	36.8	Good	Good	21	Landmark	Remove	Viable	3	
1587	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	15.0	Good	Good	8	Significant	Impacted	Viable		
1588	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	26.0	Good	Good	10	Significant	Impacted	Viable		
1589	Site Tree	*Acer macrophyllum*	Bigleaf maple	21.1	Good	Good	25	Significant	Impacted	Viable		Enveloping fence, phototropic to the southwest
1590	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	37.0	Good	Good	21	Landmark	Retain	Viable		
1591	Site Tree	*Acer macrophyllum*	Bigleaf maple	15.9	Good	Fair	13	Significant	Retain	Viable		Codominant, one stem dead at 20 feet
1592	Site Tree	*Acer macrophyllum*	Bigleaf maple	17.8	Good	Good	14	Significant	Retain	Viable		
1593	Site Tree	*Acer macrophyllum*	Bigleaf maple	16.7	Good	Good	11	Significant	Retain	Viable		
1594	Site Tree	*Acer macrophyllum*	Bigleaf maple	19.0	Good	Fair	14	Significant	Retain	Viable		Wound from base to 20 feet with decay
1595	Site Tree	*Acer macrophyllum*	Bigleaf maple	8.8	Good	Good	12	Significant	Retain	Viable		
1596	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	47.5	Good	Good	18	Landmark	Retain	Viable		On property line, shared tree
1597	Site Tree	*Acer macrophyllum*	Bigleaf maple	7.5	Good	Good	13	Significant	Retain	Viable		
1598	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.3	Good	Good	17	Landmark	Retain	Viable		
1599	Site Tree	*Acer macrophyllum*	Bigleaf maple	13.5	Good	Good	9	Significant	Retain	Viable		
1600	Site Tree	*Thuja plicata*	Western redcedar	11.1	Good	Good	10	Significant	Retain	Viable		
1601	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	38.5	Good	Good	15	Landmark	Retain	Viable		
1602	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	19.8	Good	Good	15	Significant	Retain	Viable		
1603	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	12.0	Good	Fair	8	Significant	Retain	Viable		Girdling by barbed wire, lost top

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Table of Trees
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Tree ID	Tree Location	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)	Tree Designation	Preliminary Tree Retention	Viability	Number of Replacement Trees	Notes
1604	Site Tree	*Acer macrophyllum*	Bigleaf maple	19.2	Good	Good	14	Significant	Impacted	Viable		
1605	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	41.1	Good	Good	14	Landmark	Retain	Viable		
1606	Site Tree	*Acer macrophyllum*	Bigleaf maple	10.1	Good	Good	13	Significant	Impacted	Viable		
1607	Site Tree	*Acer macrophyllum*	Bigleaf maple	17.2	Good	Good	13	Significant	Retain	Viable		
1608	Site Tree	*Acer macrophyllum*	Bigleaf maple	11.8	Good	Good	16	Significant	Retain	Viable		
1609	Site Tree	*Acer macrophyllum*	Bigleaf maple	27.5	Good	Good	13	Significant	Impacted	Viable		Codominant at 8 feet
1610	Site Tree	*Acer macrophyllum*	Bigleaf maple	14.4	Good	Good	13	Significant	Impacted	Viable		Phototropic to north
1611	Site Tree	*Acer macrophyllum*	Bigleaf maple	23.6	Good	Good	16	Significant	Impacted	Viable		Phototropic to north
1612	Site Tree	*Acer macrophyllum*	Bigleaf maple	11.2	Good	Good	12	Significant	Impacted	Viable		Phototropic to north
1613	Site Tree	*Acer macrophyllum*	Bigleaf maple	26.0	Good	Good	21	Significant	Impacted	Viable		Phototropic to north, codominant at 6 feet, enveloping wire fence
1614	Site Tree	*Thuja plicata*	Western redcedar	29.2	Good	Good	13	Significant	Impacted	Viable		
1615	Site Tree	*Acer macrophyllum*	Bigleaf maple	19.5	Good	Good	14	Significant	Impacted	Viable		
1616	Site Tree	*Acer macrophyllum*	Bigleaf maple	10.1	Good	Good	12	Significant	Impacted	Viable		
1617	Site Tree	*Thuja plicata*	Western redcedar	33.6	Good	Good	13	Landmark	Impacted	Viable		Adjust Anchor point in order to not impact **landmark** tree
1618	Site Tree	*Thuja plicata*	Western redcedar	15.7	Good	Good	13	Significant	Impacted	Viable		
1619	Site Tree	*Thuja plicata*	Western redcedar	24.2	Good	Good	12	Significant	Impacted	Viable		
1620	Site Tree	*Thuja plicata*	Western redcedar	7.5	Good	Fair	8	Significant	Impacted	Viable		Suppressed
1621	Site Tree	*Thuja plicata*	Western redcedar	23.5	Good	Good	12	Significant	Impacted	Viable		
1622	Site Tree	*Acer macrophyllum*	Bigleaf maple	8.5	Good	Good	9	Significant	Retain	Viable		
1623	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	33.0	Good	Good	12	Landmark	Retain	Viable		
1624	Site Tree	*Thuja plicata*	Western redcedar	9.4	Good	Good	9	Significant	Retain	Viable		
1625	Site Tree	*Thuja plicata*	Western redcedar	11.8	Good	Good	11	Significant	Retain	Viable		
1626	Site Tree	*Acer macrophyllum*	Bigleaf maple	8.4	Good	Good	13	Significant	Retain	Viable		
1627	Site Tree	*Acer macrophyllum*	Bigleaf maple	12.3	Good	Good	14	Significant	Retain	Viable		
1628	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.0	Good	Good	16	Landmark	Retain	Viable		
1629	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	12.3	Good	Good	10	Significant	Retain	Viable		
1630	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	26.5	Good	Good	15	Significant	Retain	Viable		
1631	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	12.1	Good	Good	8	Significant	Retain	Viable		
1632	Site Tree	*Acer macrophyllum*	Bigleaf maple	30.4	Good	Poor	14	Landmark	Retain - Unhealthy	Non-Viable		Codominant at 25 feet, one stem dead, significant decay at union in both stems, low vigor
1633	Site Tree	*Acer macrophyllum*	Bigleaf maple	14.0	Good	Good	12	Significant	Retain	Viable		
1634	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	16.6	Good	Good	8	Significant	Retain	Viable		
1635	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	14.5	Good	Good	13	Significant	Retain	Viable		
1636	Site Tree	*Acer macrophyllum*	Bigleaf maple	12.1	Good	Good	9	Significant	Retain	Viable		
1637	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	34.6	Good	Good	9	Landmark	Retain	Viable		
1638	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	14.0	Good	Good	12	Significant	Retain	Viable		
1639	Site Tree	*Acer macrophyllum*	Bigleaf maple	6.0	Good	Good	15	Significant	Retain	Viable		
1640	Site Tree	*Acer macrophyllum*	Bigleaf maple	6.1	Good	Good	10	Significant	Retain	Viable		
1641	Site Tree	*Acer macrophyllum*	Bigleaf maple	28.8	Good	Fair	18	Significant	Remove	Viable	1	Codominant at 15 feet, one dead stem, phototropic to north
1642	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	39.0	Good	Good	14	Landmark	Retain	Viable		
1643	Site Tree	*Acer macrophyllum*	Bigleaf maple	9.2	Good	Good	8	Significant	Retain	Viable		
1644	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	32.0	Good	Good	13	Landmark	Retain	Viable		
1645	Site Tree	*Acer macrophyllum*	Bigleaf maple	7.0	Good	Good	10	Significant	Retain	Viable		
1646	Site Tree	*Acer pseudoplatanus*	Sycamore maple	12.6	Good	Good	13	Significant	Remove	Viable	1	
1647	Site Tree	*Acer pseudoplatanus*	Sycamore maple	13.0	Good	Good	14	Significant	Remove	Viable	1	
1648	Site Tree	*Acer pseudoplatanus*	Sycamore maple	15.3	Good	Good	15	Significant	Remove	Viable	1	Codominant at 20 feet
1649	Site Tree	*Acer pseudoplatanus*	Sycamore maple	16.0	Good	Good	13	Significant	Remove	Viable	1	Codominant at 15 feet
1650	Site Tree	*Acer pseudoplatanus*	Sycamore maple	16.8	Good	Good	17	Significant	Remove	Viable	1	
1651	Site Tree	*Acer pseudoplatanus*	Sycamore maple	15.0	Good	Good	20	Significant	Remove	Viable	1	
1652	Site Tree	*Acer pseudoplatanus*	Sycamore maple	7.8	Good	Good	16	Significant	Remove	Viable	1	
1653	Site Tree	*Acer pseudoplatanus*	Sycamore maple	8.2	Good	Good	16	Significant	Retain	Viable		
1654	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	25.6	Good	Good	12	Significant	Retain	Viable		
1655	Site Tree	*Acer pseudoplatanus*	Sycamore maple	8.6	Good	Good	9	Significant	Retain	Viable		
1656	Site Tree	*Acer pseudoplatanus*	Sycamore maple	11.8	Good	Good	13	Significant	Remove	Viable	1	
1657	Site Tree	*Betula pendula*	European white birch	13.4	Good	Fair	11	Significant	Remove	Viable	1	Dead top

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Tree ID	Tree Location	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)	Tree Designation	Preliminary Tree Retention	Viability	Number of Replacement Trees	Notes
1658	Site Tree	*Acer macrophyllum*	Bigleaf maple	26.0	Good	Good	17	Significant	Remove	Viable	1	
1659	Site Tree	*Prunus serrulata*	Flowering cherry	11.0	Good	Fair	16	Significant	Remove	Viable	1	Codominant at 3 feet, included bark
1660	Site Tree	*Thuja plicata*	Western redcedar	41.9	Good	Good	11	Landmark	Remove	Viable	3	Multistem at 5 feet
1661	Site Tree	*Prunus domestica*	Common plum	7.5	Good	Fair	10	Significant	Remove	Viable	1	Codominant at 2 feet, included bark
1662	Site Tree	*Thuja plicata*	Western redcedar	39.8	Good	Good	21	Landmark	Remove	Viable	3	
1663	Site Tree	*Picea pungens*	Colorado spruce	14.4	Good	Good	11	Significant	Remove	Viable	1	Remove for frontage improvements**
1664	Site Tree	*Prunus domestica*	Common plum	10.5	Poor	Fair	13	Significant	Remove - Unhealthy	Non-Viable		Codominant at 3 feet, heavy ivy and grape covering canopy
1665	Site Tree	*Abies grandis*	Grand fir	17.8	Good	Fair	12	Significant	Remove	Viable	1	Lost top
1666	Site Tree	*Abies grandis*	Grand fir	15.0	Good	Good	10	Significant	Remove	Viable	1	
1667	Site Tree	*Abies grandis*	Grand fir	10.4	Fair	Good	8	Significant	Remove	Viable	1	Some dieback
1668	Site Tree	*Prunus cerasifera*	Cherry plum	13.1	Good	Fair	16	Significant	Remove	Viable	1	Multistem at 3 feet, included bark
1669	Site Tree	*Liriodendron tulipifera*	Tulip tree	19.9	Good	Good	29	Significant	Remove	Viable	1	
1670	Site Tree	*Ilex aquifolium*	English holly	8.2	Good	Good	9	Significant	Remove	Viable	1	Multistem at 1 foot
1671	Site Tree	*Malus domestica*	Apple	9.8	Good	Poor	13	Significant	Remove - Unhealthy	Non-Viable		Significant basal decay
1672	Site Tree	*Tilia tomentosa*	Silver Linden	10.6	Good	Good	19	Significant	Remove	Viable	1	Multistem at base
1673	Site Tree	*Acer pseudoplatanus*	Sycamore maple	17.8	Good	Good	17	Significant	Remove	Viable	1	
1674	Site Tree	*Pseudotsuga menziesii*	Douglas-fir	23.0	Good	Good	18	Significant	Remove	Viable	1	No access, not tagged, estimated measurements
1675	Site Tree	*Thuja plicata*	Western redcedar	19.0	Good	Good	18	Significant	Remove	Viable	1	Codominant at 2 feet
1676	Site Tree	*Pyrus communis*	European pear	10.1	Good	Good	8	Significant	Remove	Viable	1	
1677	Site Tree	*Malus domestica*	Apple	17.4	Good	Good	12	Significant	Remove	Viable	1	Invasive ivy to 10 feet
1678	Site Tree	*Malus domestica*	Apple	7.8	Good	Good	13	Significant	Remove	Viable	1	
A	Off-Site	*Acer macrophyllum*	Bigleaf maple	20.0	Good	Good	18	Significant	Retain	Viable		Appears to overhang site, no corner marker, corner not on survey, appears to overhang approximately 8 feet
B	Off-Site	*Acer macrophyllum*	Bigleaf maple	40.0	Good	Good	25	Landmark	Retain	Viable		Appears to overhang site, no corner marker, corner not on survey, appears to overhang approximately 5 feet, codominant at 6 feet
C	Off-Site	*Pseudotsuga menziesii*	Douglas-fir	28.0	Good	Good	13	Significant	Retain	Viable		Overhangs approximately 3 feet
D	Off-Site	*Pseudotsuga menziesii*	Douglas-fir	12.0	Good	Good	15	Significant	Retain	Viable		Overhangs approximately 3 feet
E	Off-Site	*Acer macrophyllum*	Bigleaf maple	14.0	Good	Good	22	Significant	Retain	Viable		Overhangs approximately 2 feet
F	Off-Site	*Acer macrophyllum*	Bigleaf maple	10.0	Good	Good	19	Significant	Retain	Viable		Overhangs approximately 15 feet
G	Off-Site	*Acer macrophyllum*	Bigleaf maple	14.7	Good	Fair	25	Significant	Remove	Viable	1	Remove for frontage improvements, overhangs approximately 23 feet, **in ROW**
H	Off-Site	*Pseudotsuga menziesii*	Douglas-fir	35.0	Good	Good	29	Landmark	Remove	Viable	3	Reassess retention as plans are finalized, overhangs approximately 24 feet
I	Off-Site	*Picea pungens*	Colorado spruce	10.0	Good	Good	12	Significant	Retained/Impacted*	Viable		Overhangs approximately 6 feet
J	Off-Site	*Picea pungens*	Colorado spruce	10.0	Good	Good	8	Significant	Retained/Impacted*	Viable		Overhangs approximately 2 feet
K	Off-Site	*Tsuga heterophylla*	Western hemlock	12.0	Fair	Good	12	Significant	Retained/Impacted*	Viable		Overhangs approximately 6 feet, sparse needles
L	Off-Site	*Tsuga heterophylla*	Western hemlock	14.0	Good	Good	20	Significant	Impacted	Viable		Overhangs approximately 15 feet
M	Off-Site	*Thuja plicata*	Western redcedar	20.0	Good	Good	12	Significant	Retain	Viable		Overhangs approximately site 1 foot
N	Off-Site	*Tsuga heterophylla*	Western hemlock	16.0	Good	Good	15	Significant	Retain	Viable		Overhangs approximately 8 feet
O	Off-Site	*Acer macrophyllum*	Bigleaf maple	12.0	Good	Good	30	Significant	Retain	Viable		Overhangs approximately 15 feet, deadwood in canopy
P	Off-Site	*Acer pseudoplatanus*	Sycamore maple	6.0	Good	Good	15	Significant	Impacted	Viable		Reassess retention as plans are finalized, overhangs approximately 10 feet
Q	Off-Site	*Acer macrophyllum*	Bigleaf maple	33.0	Good	Good	20	Landmark	Remove	Viable	3	Remove for frontage improvements, overhangs approximately 18 feet, **in ROW**
R	Off-Site	*Ilex aquifolium*	English holly	8.6	Good	Good	10	Significant	Remove	Viable	1	Remove for frontage improvements, overhangs approximately 8 feet, **in ROW**
S	Off-Site	*Pseudotsuga menziesii*	Douglas-fir	28.0	Good	Good	12	Significant	Remove	Viable	1	Remove for frontage improvements, overhangs approximately 10 feet, **in ROW**
T	Off-Site	*Thuja plicata*	Western redcedar	29.0	Good	Good	13	Significant	Remove	Viable	1	Remove for frontage improvements, overhangs approximately 11 feet, **in ROW**
U	Off-Site	*Acer macrophyllum*	Bigleaf maple	26.0	Good	Good	12	Significant	Remove	Viable	1	Remove for frontage improvements, overhangs approximately 8 feet, **in ROW**
V	Off-Site	*Pseudotsuga menziesii*	Douglas-fir	16.0	Good	Good	13	Significant	Impacted	Viable		Overhangs approximately 12 feet

Tree Solutions Inc
Consulting Arborists

Table of Trees
13437 NE 100th St
Redmond, WA 98033, USA

Date of Inventory: July 12, 2018
Table Prepared: August 29, 2018
Revised: February 27, 2019

Tree ID	Tree Location	Scientific Name	Common Name	DSH (inches)	Health Condition	Structural Condition	Dripline Radius (feet)	Tree Designation	Preliminary Tree Retention	Viability	Number of Replacement Trees	Notes

	Site Trees	Off-Site Trees	Total
Preliminary Retained			
Total Significant Retained	74	8	82
Total Landmark Retained	18	1	19
Total Retained	**92**	**9**	**101**
Preliminary Retained/Impacted			
Total Significant Retained/Impacted	0	3	3
Total Landmark Retained/Impacted	0	0	0
Total Retained/Impacted	**0**	**3**	**3**
Preliminary Impacted			
Total Significant Impacted	33	3	36
Total Landmark Impacted	6	0	6
Total Impacted	**39**	**3**	**42**
Preliminary Removed			
Total Significant Removed	35	5	40
Total Landmark Removed	4	2	6
Total Removed	**39**	**7**	**46**
Preliminary Replacement			
Replacement Trees for Significant Tree Removals (1:1)	35	5	40
Replacement Trees for Landmark Tree Removals (3:1)	12	6	18
Total Replacement Trees	**47**	**11**	**58**

Viable Site Trees	170
Non-Viable Site Trees	8
Total Site Trees	178
Preliminary Retention Percentage for Site Trees	54.1%

Additional notes:

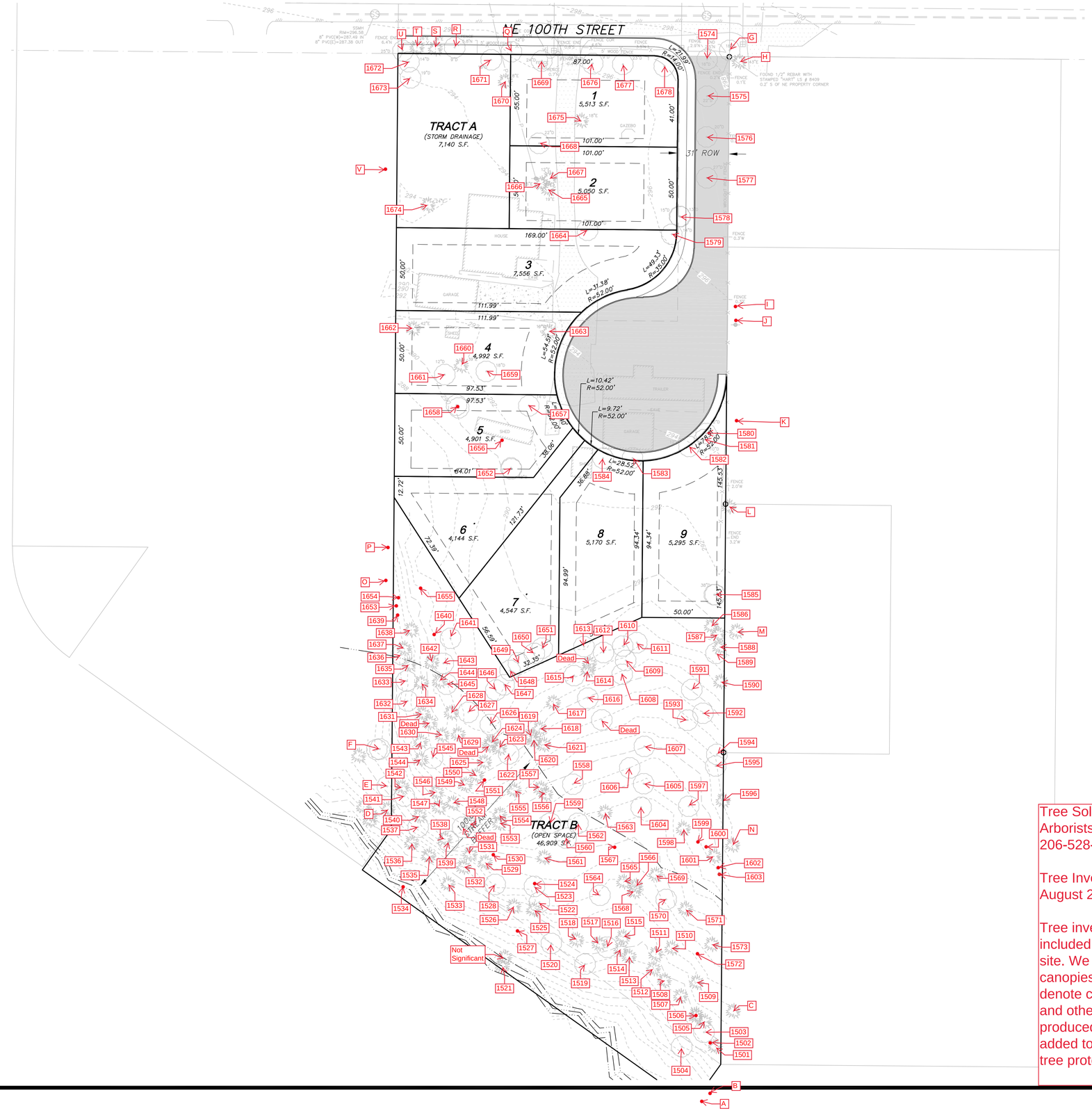
DSH (Diameter at Standard Height) is measured 4.5 feet above grade.
Multi-stem trees are noted, and a single stem equivalent is calculated by averaging the diameters of the stems measured six inches above the union
Drip line is measured from the center of the tree to the outermost extent of the canopy
**Trees that are considered Retained/Impacted will require mitigation measures to ensure viability throughout the project in order to count toward retention requirements for the site*

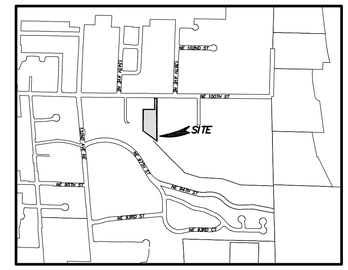
Site Trees					
Tree	Remove	Impacted	Retained/I	Retained	Total
Landmar	4	6	0	18	28
k (>30"	2.4%	3.5%	0.0%	10.6%	16.5%
Significan	35	33	0	74	142
t (6" -	20.6%	19.4%	0.0%	43.5%	83.5%
Total	39	39	0	92	170
	22.9%	22.9%	0.0%	54.1%	100.0%
Replace	47	0	0	0	47
ment					

Off-Site Trees					
Tree Type	Remove	Impacted	Retained/I mpacted*	Retained	Total
Landmar	2	0	0	1	3
k (>30"	9.1%	0.0%	0.0%	4.5%	13.6%
Significan	5	3	3	8	19
t (6" -	22.7%	13.6%	13.6%	36.4%	86.4%
Total	7	3	3	9	22
	31.8%	13.6%	13.6%	40.9%	100.0%
Replace	11	0	0	0	11
ment					

NE 1/4 SECTION 3, TOWNSHIP 25 N, RANGE 4 5, W.M.

REDMOND 9 PRELIMINARY PLAT





NORTH

VICINITY MAP
SCALE: 1" = 900'

PROJECT NOTES

1. ALL SITE INFORMATION OBTAINED FROM SURVEY BY OTHERS. BOUNDARY AND OTHER SITE FEATURES ARE APPROXIMATE AND HAVE NOT BEEN CONFIRMED BY DRS.
2. SITE ADDRESS: 13437 AND 13411 NE 100TH STREET 98033 KIRKLAND, WA
3. TAX PARCEL NO: 0325059035 AND 0325059208
4. SITE AREA: 107,400 S.F. (2.466 ACRES)
5. ZONING: RIN ZONE
6. MIN. AVERAGE LOT SIZE: 4,000 PER RZC 21.08.070.B
7. MIN. LOT WIDTH: 35 FT. PER RZC 21.08.070.B
8. MAX IMPERVIOUS SURFACE: 65% PER RZC 21.08.070.B

Table 21.08.070A
Regulations Common to All Uses

	Regulation	Size area of 30,500 square feet or greater	Size area less than 30,500 square feet
Minimum	Average Lot Size	4,000 square feet	7,000
	Required Density	80 percent of net acres	80 percent of net acres
	Lot Width Circle	35 feet	40 feet
	Lot Frontage	20 feet	20 feet
	Setbacks		
	Front	15 feet	15 feet
	Garage	18 feet	18 feet
	Side / Interior (each side)	5 feet / 10 feet	5 feet / 10 feet
	Side Street	15 feet	15 feet
	Rear	10 feet	10 feet
	Alley	4 feet	4 feet
	Lake Sammamish	35 feet	35 feet
	Building Separation	15 feet; 10 feet for cottages, size-limited dwellings, small-lot short plats, accessory dwelling units, and locations where these structures or cottages adjoin larger dwelling units.	15 feet; 10 feet for cottages, size-limited dwellings, small-lot short plats, accessory dwelling units, and locations where these structures or cottages adjoin larger dwelling units.
	Open Space	20 percent of total lot area	20 percent of total lot area
Maximum	Density	5 units per acre, except when participating in cottage housing or programs with bonus density provisions	4 units per acre, except when participating in cottage housing or programs with bonus density provisions
	Lot Coverage for Structures	35 percent of total lot area	35 percent of total lot area
	Impervious Surface	65 percent of total lot area	60 percent of total lot area
	Building Height	25 feet; 30 feet in Shoreline Jurisdiction	25 feet; 30 feet in Shoreline Jurisdiction
	Drive-through	n/a	Drive-through facilities are prohibited except where expressly permitted in the Allowed Uses and Special Regulations table below.

Tree Solutions Inc.
Arborists: Joshua Petter & Tyler Bunton
206-528-4670

Tree Inventory
August 29, 2018

Tree inventory took place on July 12, 2018 and included all trees 6-inches diameter or greater on the site. We also assessed trees with overhanging canopies. Tree icons used on the survey do not denote canopy drip lines. Drip line measurements and other tree specifics are listed in the tree table produced by Tree Solutions Inc. and should be added to this drawing prior to any design relating to tree protection.

NORTH
GRAPHIC SCALE
0 15 30 60
1 INCH = 30 FT.

D.R. STRONG
CONSULTING ENGINEERS
ENGINEERS PLANNERS SURVEYORS
620 - 7th AVENUE KIRKLAND, WA 98033
O 425.827.3063 F 425.827.2423

REDMOND 9
PRELIMINARY PLAT

SITE PLAN
13437 NE 100TH STREET
KIRKLAND, WA 98033
TAX PARCEL NO. 0325059208

HARBOUR HOMES, LLC

Harbour Homes
400 N 34TH STREET SUITE 300
SEATTLE, WA 98103
206.315.8130

DATE	REVISION	APR
06.07.18	PER CLIENT COMMENTS	LRJ

DRAFTED BY: ZLJ
DESIGNED BY: ZLJ
PROJECT ENGINEER: LRJ
DATE: 04.09.18
PROJECT NO.: 18037

DRAWING: 1
SHEET: 1 OF 1

Tree Solutions Inc
Consulting Arborists

Project No. TS - 6413

Memorandum

TO:	City of Redmond
SITE:	13437 NE 100th St, Redmond, WA 98033
RE:	Exception request to remove six (6) Landmark trees per RZC 21.72.090
	Exception request to impact six (6) Landmark trees
DATE:	February 27, 2019
PROJECT ARBORISTS:	Joshua Petter ISA Certified Arborist #PN-8406A ISA Qualified Tree Risk Assessor
	Tyler Bunton ISA Certified Arborist #PN-8715A ISA Qualified Tree Risk Assessor

Summary
The site is located in a RIN Single-Family Urban residential zone and is currently under consideration for development. The property fronts NE 100th St in Redmond. It currently contains three parcels. There are two houses, a garage, and shed on the property. There are a number of fences on the property. The site is relatively flat on the northern half. The southern portion slopes downward to a stream and wetland area.

In accordance with RZC 21.72.060, all new development is required to retain 35 percent of the trees on site. For the subject site, 23 trees would need to be retained to meet the 35 percent retention requirement. The proposed plan for the site meets this requirement at 54.1 percent retention.

The project area has total of 31 Landmark trees; 28 of which are on site and three of which are located on adjacent property.

RZC 21.72.060 A.2., requires that all Landmark trees be retained unless an exception request is granted. Per RZC 21.72.090, an exception will be not be granted unless B.1., B.2., B.3., and B.4. are satisfied. Below, please find the requests to remove four and impact two Landmark trees.

Tree 1585: Request an exception to **remove Landmark tree**

B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or

This tree is located within the proposed area for Lot 9 and adjacent to the proposed retaining wall necessary for construction area grading. A large percentage of the dripline encroaches into the buildable area of the lot. The encroachments into the dripline for grading and construction could not guarantee survivability.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
Moving the retaining wall to an appropriate distance from the tree will result in the lot being too small to develop. Tree survival could not be guaranteed with the grading in the dripline.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree 1586: Request an exception to **remove Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located on the southeast corner of lot 9 and would need to be removed based on the proposed construction of the retaining wall necessary for construction area grading.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
Moving the retaining wall to an appropriate distance from the tree will result in the lot being too small to develop. Tree survival could not be guaranteed with the grading in the dripline.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or

Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree 1660: Request an exception to **remove Landmark tree**

B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the buildable area for Lot 6. Retention of this tree would result in the buildable area of the lot being too small to develop.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
There is no feasible alternative for placement of Lot 6.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree 1662: Request an exception to **remove Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the proposed area for Lot 6. A large percentage of the dripline encroaches into the buildable area of the lot. The encroachments into the dripline for grading and construction could not guarantee survivability.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
There is no feasible alternative for placement of Lot 6. Tree survival could not be guaranteed with the grading and construction within the dripline.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree H: Request an exception to **remove Landmark tree adjacent to site**

B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or

This is an offsite tree that would be in conflict with proposed frontage improvements associated with the development of the property. The access road and grading for these improvements are required within the trees dripline.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or

The tree must be removed to provide required ROW and frontage improvements and access to the site.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or

The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or

Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.

The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.

This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.

The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree Q: Request an exception to **remove Landmark tree adjacent to site**

B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or

This tree is located in the area for required right of way (ROW) and frontage improvements associated with the development of the property. Grading for these improvements are required within the trees dripline.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or

The tree must be removed to provide required ROW and frontage improvements.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 32 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
The project is proposing retention above the 35 percent retention minimum. The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is not located within the open space tract - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
The removal of this Landmark tree will be mitigated by replacement at a 3:1 ratio.

Tree 1508: Request an exception to **impact Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer adjacent to the surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Tree 1511: Request an exception to **impact Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer adjacent to the surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Tree 1515: Request an exception to **impact Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer adjacent to the surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Tree 1563: Request an exception to **impact Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer adjacent to the surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Tree 1569: Request an exception to **impact Landmark tree**
B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer adjacent to the surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Tree 1617: Request an exception to **impact Landmark tree**

B.1.a. There are special circumstances related to the size, shape, topography, location, or surroundings of the subject property; or
This tree is located within the wetland and stream buffer just west of the required surface stormwater outflow pipe. The required stormwater outflow pipe has been positioned to impact as few trees as possible.

B.1.b. Strict compliance with the provisions of this code may jeopardize reasonable use of property; or
The tree must be impacted to provide required stormwater outflow for the development.

B.1.c. Proposed vegetation removal, replacement, and any mitigating measures proposed are consistent with the purpose and intent of the regulations; or
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond. Anchor points for the storm pipe may be adjusted to avoid large structural roots.

B.1.d. The granting of the exception or standard reduction will not be detrimental to the public welfare or injurious to other property in the vicinity; or
Out of the 31 Landmark trees in the project area, 19 are to be retained. All removed landmark trees be replaced at a 3:1 ratio. Please note that 74 healthy significant trees will be retained on site without being impacted. Public welfare and adjacent properties will not be compromised.

B.2. If an exception is granted below the required minimum retention standard of 35 percent, tree replacement shall be at a minimum of three trees for each significant tree removed. Tree replacement ratios may be modified for master plans within urban centers to allow for 1:1 replacement when accompanied by a three-tier vegetative replacement plan.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

B.3. Native Growth Protection Area (NGPA). Trees within an established NGPA shall not be removed, except when removal has its specified purpose.
This tree is proposed to be impacted - items a through h not applicable.

B.4. Proposed tree removal, replacement, and any mitigation proposed are consistent with the purpose and intent of this section.
This Landmark tree is proposed to be impacted and will require a 3-year tree replacement performance bond.

Appendix A - Assumptions & Limiting Conditions

1. Consultant has agreed to undertake Services on the subject Site. Consultant assumes that the Client owns or is the agent for the owner of the Site and that the legal description of the Site provided by the Client is accurate. Consultant assumes that Client has granted a license over, under, upon, and across the Site for the limited purpose of providing Services.
2. Consultant assumes that the Site and its use do not violate and is in compliance with all applicable codes, ordinances, statutes or regulations.
3. The Client is responsible for making all relevant records and related information available to the Consultant and for the accuracy and completeness of that information. Consultant may also obtain information from other sources that it considers reliable. Nonetheless, Client is responsible for the accuracy and completeness of that additional information and Consultant assumes no obligation for the accuracy and completeness of that additional information.
4. The Consultant may provide report or recommendation based on published municipal regulations. The Consultant assumes that the municipal regulations published on the date of the report are current municipal regulations and assumes no obligation related to unpublished city regulation information.
5. Any report by Consultant and any values expressed therein represent the opinion of the Consultant, and the Consultant's fee is in no way contingent upon the reporting of a specific value, a stipulated result, the occurrence of a subsequent event, or upon any finding to be reported.
6. Ownership of any documents produced passes to the Client only when all fees have been paid.
7. All photographs included in our reports were taken by Tree Solutions, Inc. during the documented Site visit, unless otherwise noted. Sketches, drawings and photographs in any report by Consultant, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of any information generated by architects, engineers or other consultants and any sketches, drawings or photographs is for the express purpose of coordination and ease of reference only. Inclusion of such information on any drawings or other documents does not constitute a representation by Consultant as to the sufficiency or accuracy of the information.
8. Unless otherwise agreed, (1) information contained in any report by Consultant covers only the items examined and reflects the condition of those items at the time of inspection; and (2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, climbing, or coring.
9. Consultant makes no warranty or guarantee, express or implied, that the problems or deficiencies of the plants or Site in question may not arise in the future. Any report is based on the observations and opinions of the authoring arborist, and does not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described assessed. Neither the Arborist nor Tree Solutions, Inc. has assumed any responsibility for liability associated with the trees on or adjacent to this project site, their future demise and/or any damage which may result therefrom. Any changes to an established tree's environment can cause its decline, death and/or structural failure.
10. Measurements are subject to typical margins of error, considering the oval or asymmetrical cross-section of most trunks and canopies.
11. Tree Solutions did not review any reports or perform any tests related to the soil located on the subject property unless outlined in the scope of services. Tree Solutions staff are not and do not claim to be soils experts. An independent inventory and evaluation of the site's soil should be obtained by a qualified professional if an additional understanding of the site's characteristics is needed to make an informed decision.
12. Our assessments are made in conformity with acceptable evaluation/diagnostic reporting techniques and procedures, as recommended by the International Society of Arboriculture.